

**REMARKS**

This Amendment and Response is submitted to place the application in better form for examination. The Amendment and Response amends claims 13 and 15-16 to more fully set forth the patentable subject matter claimed, as well as cancels claim 17. Following entry of the Amendment, claims 4-6 and 13-16 remain pending.

Amendment to the Specification

The Applicant has amended the specification to indicate that Application Serial No. 09/298,272 (now U.S. Patent No. 6,142,924,) is a continuation of U.S. Application No. 08/950,377. This amendment removes the phrase "claims the benefit of," to which the Examiner objected. The Applicant respectfully submits that the amendment to the specification introduces no new matter.

Double Patenting Rejection

*it is a patent*  
The Examiner provisionally rejected claims 13, 15, 16, and 17 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 11, and 12 of U.S. Patent No. 5,944,648 to Cornay. The Applicant respectfully asserts that, should the aforementioned co-pending application be granted prior to the present application, the Applicant will submit a terminal disclaimer limiting the duration of any claim in the present application to the life of the patent issuing from the co-pending application. The Applicant believes that the terminal disclaimer, if necessary, will overcome the Examiner's rejection.

35 U.S.C. § 112, Second Paragraph Rejections

The Examiner rejected claims 4-6 and 13-17 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

First, the Examiner alleged that claim 13 failed to recite a structural relationship between the claimed "concentrically innermost tube" and the elements of claim 16. Claim 13 has been

amended to indicate that the baffle comprises one or more concentric tubes, thus providing the structure desired by the Examiner.

In claim 15, the Examiner alleged that the phrase "one or more tube walls" was indefinite. Claim 15 has been amended to recite that the baffle comprises one or more tube walls.

In claim 16, the phrase "a mixture of initial material" in the body of the claim has been amended to indicate that the mixture is the same as in the preamble.

Claim 17 has been cancelled, thereby obviating the rejection to the claim.

35 U.S.C. § 102(b) Rejections- Nerad

The Examiner rejected claims 4-5, 13, 14, and 16 under 35 U.S.C. § 102(b) as being anticipated by Unites States Patent No. 3,150,944 to Nerad (hereinafter "Nerad"). The Applicant respectfully traverses this rejection for at least the following reasons.

*1. Claim 16*

Generally, the Examiner alleged that Nerad anticipated all limitations of claim 16, prior to entry of this Amendment. Claim 16 has been amended to require "removal means for continuously removing said heavier material from said housing during operation and procedure, said removal means non-rotating with respect to a reference point external to said housing." The Applicant respectfully submits that Nerad fails to disclose any such removal means. Accordingly, the Applicant respectfully requests the Examiner withdraw his rejection and allow claim 16, as amended.

*2. Claims 4-5, 13, and 14*

Claims 4-5, 13, and 14 depend from independent claim 16. The Applicant respectfully submits that independent claim 16 has already been shown to be patentable. Accordingly, claims 4-5, 13, and 14 are themselves patentable, insofar as they depend from a patentably distinct

independent claim. The Applicant makes this assertion without reference to the independent bases of patentability contained within each dependent claim. Accordingly, the Applicant respectfully requests the Examiner withdraw his rejections and allow all pending dependent claims.

35 U.S.C. § 102(b) Rejections- Strezynski

The Examiner rejected claims 4-5, 13, 14, and 16 under 35 U.S.C. § 102(b) as being anticipated by Unites States Patent No. 2,185,279 to Strezynski (hereinafter "Strezynski"). The Applicant respectfully traverses this rejection for at least the following reasons.

*1. Claim 16*

Generally, the Examiner alleged that Nerad anticipated all limitations of claim 16, prior to entry of this Amendment. Claim 16 has been amended to require "removal means for continuously removing said heavier material from said housing during operation and procedure, said removal means non-rotating with respect to a reference point external to said housing." The Applicant respectfully submits that Nerad fails to disclose any such removal means.

Generally, the Examiner alleged (with respect to now-cancelled claim 17) that Strezynski teaches "means 30, 31 for removing heavier material from the housing." The Applicant respectfully submits that claim 16 requires not only means for removing heavier material, but means for *continuously* removing heavier material. Strezynski fails to teach such continuous removal means. Elements 30 and 31 of Strezynski are a "radially movable needle valve 30" and a "bell-crank lever 31," with the valve connected to the short end of the lever (col. 3, lines 16-20). Strezynski also teaches that the valve may be opened manually, or a mechanism "may be operated automatically to open and close the valve 30 at timed intervals" (col. 3, lines 23-32).

The Applicant respectfully submits that the valve and lever arrangement of Strezynski is designed to remain open only when manually operated or at timed intervals. The valve is not constantly or continually open. Accordingly, orifice 28 is blocked at least during some time of

operation. Therefore, the Applicant respectfully submits that the elements disclosed by Strezynski do not continuously remove heavier material, but instead intermittently remove such material. Accordingly, the reference cited by the Examiner cannot anticipate the invention of claim 16.

Further, claim 16 requires a removal means "non-rotatable" with respect to a housing. The valve and lever arrangement of Strezynski may only move radially, or towards and away from the hub (col. 3, lines 16-17). In order to block the orifice during operation, the valve 30 must rotate with the orifice. Further, Figs. 1 and 10 of Strezynski clearly show that the valve must rotate when the centrifugal separator rotates. By contrast, Strezynski's outer housing (the outer wall defining channel 36) is stationary. Accordingly, the valve and lever arrangement rotates with respect to a reference point external to Strezynski's housing, which is exactly the opposite of the element recited in claim 16. Accordingly, the reference cited by the Examiner cannot anticipate the invention of claim 16.

For all the foregoing reasons, the Applicant respectfully submits that Strezynski cannot anticipate the invention of claim 16, as amended. Accordingly, the Applicant respectfully requests the Examiner withdraw his rejection and allow claim 16.

## *2. Claim 15*

With respect to claim 15, the Applicant respectfully notes that this claim was previously deemed allowable by the Examiner.

Further, the Applicant respectfully submits that claim 15 requires a "baffle comprising one or more tube walls... [and] defining a flow path between said one or more tube walls." Further, claim 15 requires the "flow path including a first exit path for guiding said lighter material out of said housing and a second exit path for guiding said heavier material out of said housing."

In rejecting the claim, the Examiner alleged that tube 40 anticipated the baffle and flow paths of claim 15. The Applicant respectfully disagrees. The "one or more tube walls" are elements of the baffle, not the hollow arm. Accordingly, the flow path, and its constituent exit paths, are defined by the baffle, not the tube walls of the hollow arm.

By contrast, the Examiner alleged that Strezynski's baffle 40 defined two flow paths: "one path being within the baffle 40 and another being between the outer portion of the baffle 40 and the inner portion of the arm 11, 12, 13, 14, 15, or 16." The Applicant respectfully submits that claim 15 requires both the first exit path and second exit path to be elements of a flow path between one or more tube walls in a baffle. Accordingly, the Applicant respectfully submits that Strezynski's flow paths cannot anticipate the invention of claim 15, insofar as Strezynski's flow paths are not defined by "one or more tube walls" within the meaning of claim 15.

Therefore, the Applicant respectfully requests the Examiner withdraw his rejection and allow claim 15 of the cited reference.

### *3. Claims 13-14 and 17*

Initially, the Applicant respectfully notes that claim 17 was cancelled, thereby obviating the objection to that claim.

The Applicant also respectfully notes that the basis for the Examiner's rejection of claim 13 was that Strezynski taught "a concentrically innermost tube 25." Additionally, the Applicant respectfully notes that "concentric" is defined as either "having a common center" or "having a common axis" (Meriam-Webster's Online Dictionary, accessible at <http://www.m-w.com>). Fig. 10 of Strezynski clearly shows that tube 25 is not concentric within either meaning of the word. The tube does not share a common axis or common center with any other element of Strezynski. Accordingly, the Applicant respectfully submits that tube 25 cannot be considered "concentric," and accordingly cannot serve to anticipate the "concentrically innermost tube" of claim 13.

Finally, claims 13-14 and 17 depend from independent claim 16. The Applicant respectfully submits that independent claim 16 has already been shown to be patentable. Accordingly, claims 13-14 and 17 are themselves patentable, insofar as they depend from a patentably distinct independent claim. The Applicant makes this assertion without reference to the independent bases of patentability contained within each dependent claim. Accordingly, the Applicant respectfully requests the Examiner withdraw his rejections and allow all pending dependent claims.

35 U.S.C. § 103(a) Rejections- Nerad and Coleman

The Examiner rejected claim 6 under 35 U.S.C. § 103(a) as unpatentable over Nerad in view of United States Patent No. 1,510,657 to Coleman. The Applicant respectfully submits claim 6 depends from independent claim 16. The Applicant also respectfully submits that independent claim 16 has already been shown to be patentable. Accordingly, claim 6 is itself patentable, insofar as it depends from a patentably distinct independent claim. The Applicant makes this assertion without reference to the independent bases of patentability contained within the dependent claim. Accordingly, the Applicant respectfully requests the Examiner withdraw his rejections and allow all claim 6.

CONCLUSION

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

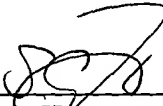
It is believed that no new matter has been added by this Amendment. A notice of allowance for the remaining claims is earnestly solicited.

This Amendment and Response is submitted contemporaneously with a Request for a Three-Month Extension of Time and the appropriate fee. The Applicant believes no further fees are due. However, if any additional petitions, requests, or fees are due, please consider this a request therefor and authorization to charge to Deposit Account 04-1415 as necessary.

Should the Examiner have any questions regarding this Amendment he feels may be answered through a telephone conference, he is urged to contact the undersigned attorney at his convenience.

Dated this 5<sup>th</sup> day of March, 2003.

Respectfully submitted,

  
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USPTO Customer No. 20686



VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

This application is a continuation of U.S. Application No. 09/298,272, filed April 23, 1999, now U.S. Patent No. 6,142,924, which [claims the benefit] is a continuation of U.S. Application No. 08/950,377, filed October 14, 1997, now U.S. Patent No. 5,944,648, which is a claims the benefit of U.S. Provisional Application No. 60/028,556, filed October 15, 1996.

In the Claims:

13. (Amended) The centrifuge of claim 16, wherein [further comprising]:  
said baffle comprises one or more concentric tubes;  
said centrifuge further comprises a concentrically innermost tube; and  
wherein said heavier material exits said hollow arm through said innermost tube.

15. (Amended) A centrifuge for decanting lighter material from heavier material from a mixture of initial material, the centrifuge comprising:  
a housing including a central body, said central body defining an axis;  
a hollow arm extending from said central body, said arm including a first end attached to said central body, and a second end extending away from said central body, said hollow arm defining a chamber; [and]  
a baffle comprising one or more tube walls, said baffle attached to said central body and extending into said chamber, said baffle defining a flow path between said one or more tube walls within said chamber;  
said flow path including a first exit path for guiding said lighter material out of said housing and a second exit path for guiding said heavier material out of said housing; and  
means for continuously removing said heavier material[s] from said housing during operation of said centrifuge.

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16. (Amended) A centrifuge for decanting lighter material from heavier material from a mixture of initial material, the centrifuge comprising:

a housing including a central body, said central body defining an axis;

a hollow arm extending from said central body, said arm including a first end attached to said central body, and a second end extending away from said central body, said hollow arm defining a chamber; and

a baffle attached to said central body and extending into said chamber, said baffle defining a flow path within said chamber;

said flow path including a first exit path for guiding said lighter material out of said housing and a second exit path for guiding said heavier material out of said housing; [and]

an outlet channel in communication with said first and second exit paths; and

removal means for continuously removing said heavier material from said housing during operation and procedure, said removal means non-rotating with respect to a reference point external to said housing;

wherein the heavier material from said mixture of initial material exits said housing through said outlet channel.

[END OF TEXT]



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Paul J. CORNAY

Serial No. 09/707,430

Filed: 6 November 2000

For: CONCENTRIC TUBULAR CENTRIFUGE

Confirmation No. 1466

Examiner: C. Cooley

Art Unit: 1723

**CERTIFICATE OF MAILING BY EXPRESS MAIL**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

The undersigned hereby certifies that the following documents:

1. Combined Amendment & Petition for Extension of Time Under 37 CFR 1.136(a)(Small Entity)(in duplicate);
2. Amendment and Response to Office Action (12 pages);
3. Check for \$465.00;
4. Certificate of Mailing by Express Mail; and
5. Return Card,

relating to the above application, were deposited as "Express Mail," Mailing Label No. EV 156 915 753 US with the United States Postal Service, addressed to Commissioner of Patents, Washington D.C. 20231, on this 5<sup>th</sup> day of March, 2003.

March 5, 2003.

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